

at least $116 \log (f_d + 6.1)$ dB, or $50 + 10 \log P$ dB, or 70 dB, whichever is the lesser attenuation;

(iii) On any frequency removed from the center frequency of the assigned channel by more than 250 percent of the authorized bandwidth:

at least $43 + 10 \log P$ dB, or 80 dB, whichever is the lesser attenuation.

(c) *Measurement procedure.* Either peak or average power may be used, provided that the same technique is used for both the adjacent channel or sideband emissions and the total emission. The resolution bandwidth of the measuring instrument must be set to 300 Hz for measurements on any frequency removed from the center frequency of the assigned channel by no more than 250 percent of the authorized bandwidth and 30 kHz for measurements on any frequency removed from the center frequency of the assigned channel by more than 250 percent of the authorized bandwidth.

§ 22.361 Standby facilities.

Licenses of stations in the Public Mobile Services may install standby transmitters for the purpose of continuing service in the event of failure or during required maintenance of regular transmitters without obtaining separate authorization, provided that operation of the standby transmitters would not increase the service areas or interference potential of the stations, and that such standby transmitters use the same antenna as the regular transmitters they temporarily replace.

TABLE C–2.—TECHNICAL REQUIREMENTS FOR DIRECTIONAL ANTENNAS

Frequency range	Maximum beamwidth	Suppression
35 to 512 MHz	80°	10 dB
512 to 1500 MHz	20°	13 dB
1500 to 2500 MHz	12°	13 dB

[59 FR 59507, Nov. 17, 1994; 60 FR 9889, Feb. 22, 1995]

§ 22.363 Directional antennas.

Fixed transmitters for point-to-point operation must use a directional transmitting antenna with the major lobe of radiation in the horizontal plane di-

rected toward the receiving antenna or passive reflector of the station for which the transmissions are intended. Directional antennas used in the Public Mobile Services must meet the technical requirements given in Table C–2 to § 22.361.

(a) Maximum beamwidth is for the major lobe at the half power points.

(b) Suppression is the minimum attenuation for any secondary lobe referenced to the main lobe.

(c) An omnidirectional antenna may be used for fixed transmitters where there are two or more receive locations at different azimuths.

§ 22.365 Antenna structures; air navigation safety.

Licenses that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See § 17.6 of this chapter.

(a) *Marking and lighting.* Antenna structures must be marked, lighted and maintained in accordance with Part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.

(b) *Maintenance contracts.* Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

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